

# Open access is possible!

On the transition of a business model.



Kansalliskirjaston Kirjastoverkkopäivät

20.-22.10.2015 Helsinki, National Library of Finland

Kai Geschuhn | Max Planck Digital Library

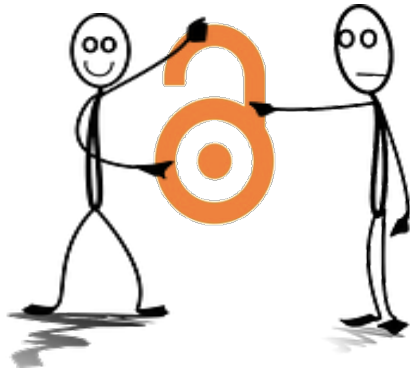


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# Open access

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Open access is a  
story of persuading.



Persuading researchers to  
change their way of  
publishing...



„Double dipping“

Open Peer Review

Institutional OA Policies

Publication Funds

Open Educational Resources

Golden route

Predatory publishing

Hybrid

Quality

?

Reputation

Text- and  
datamining

Open Access

Journal Impact Factor

Funder Mandates

Green route

Copyrights

Culture of publishing

Preprints

Postprints Repositories



Open humanities

Open data Open software

„Double dipping“ Open Peer Review Institutional OA Policies  
Publication Funds Open Educational Resources  
Golden route Predatory publishing Reputation  
Text- and Hybrid Quality  
datamining Open Access  
Green route Copyrights  
Postprints Repositories Preprints  
Open data Open software Open humanities  
Journal Impact Factor  
Funder Mandates  
Culture of publishing



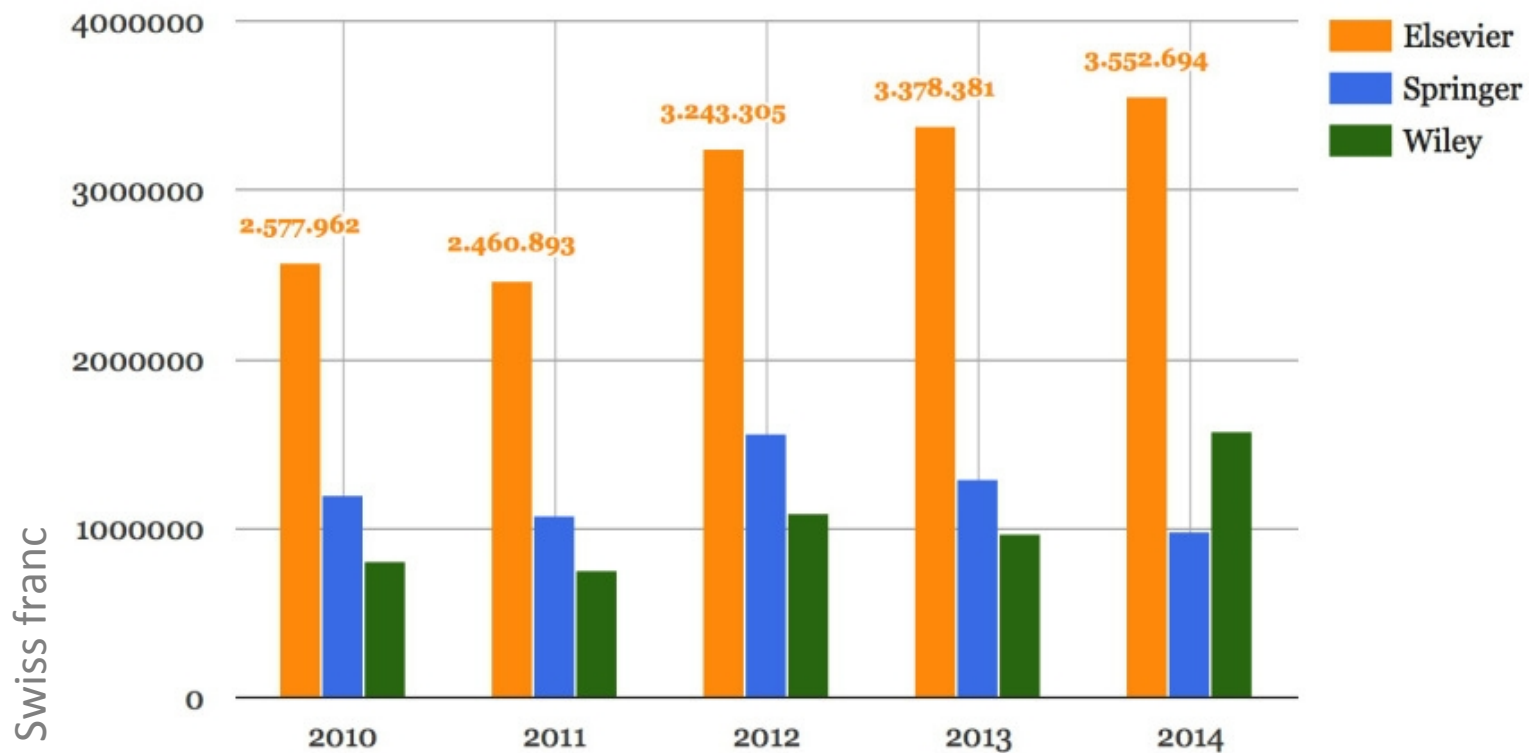
Underlying business model  
remains untouched

7,6 bn EUR/ year →



# Serials crises, still alive and kicking

Subscription costs of ETH Zürich library for three major publishers



Source: Christian Gutknecht at wisspub.net: <http://bit.ly/1QiDgUS>



# What if...?

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- ... a variety of problem-solving approaches obscured the large-scale solution?
- ... libraries were the game changers?
- ...it turned out, that they were capable to finance a publication-based open access model?



# Disrupting the subscription journal's business model...

## Disrupting the subscription journals' business model for the necessary large-scale transformation to open access

### A Max Planck Digital Library Open Access Policy White Paper

Published: 28 April 2015  
DOI: <http://dx.doi.org/10.17617/1.3>  
License: CC-BY 4.0, <http://creativecommons.org/licenses/by/4.0/>  
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#### **Abstract**

This paper makes the strong, fact-based case for a large-scale transformation of the current corpus of scientific subscription journals to an open access business model. The existing journals, with their well-tested functionalities, should be retained and developed to meet the demands of 21<sup>st</sup> century research, while the underlying payment streams undergo a major restructuring. There is sufficient momentum for this decisive push towards open access publishing. The diverse existing initiatives must be coordinated so as to converge on this clear goal. The international nature of research implies that this transformation will be achieved on a truly global scale only through a consensus of the world's most eminent research organizations. All the indications are that the money already invested in the research publishing system is sufficient to enable a transformation that will be sustainable for the future. There needs to be a shared understanding that the money currently locked in the journal subscription system must be withdrawn and repurposed for open access publishing services. The current library acquisition budgets are the ultimate reservoir for enabling the transformation without financial or other risks. The goal is to preserve the established service levels provided by publishers that are still requested by researchers, while redefining and reorganizing the necessary payment streams. By disrupting the underlying business model, the viability of journal publishing can be preserved and put on a solid footing for the scholarly developments of the future.

#### **1. Introduction**

The uptake of open access in recent years has been remarkable. Articles in open access are the most dynamic growth area in scientific publishing and have reached a market share of 13% (without even counting the hybrid component, which has also been growing rapidly as a result of British encouragement following the Finch report). In just a few short years *PLOS One* has become the largest journal in the world, both in the number of papers it publishes and in the citations it is attracting.

... for the necessary large-scale transformation to open access

<http://dx.doi.org/10.17617/1.3>



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# Enough money already in the system

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Global subscription spending

7.6 billion Euro

Anually published articles  
(according to Web of Science)

1.5 million

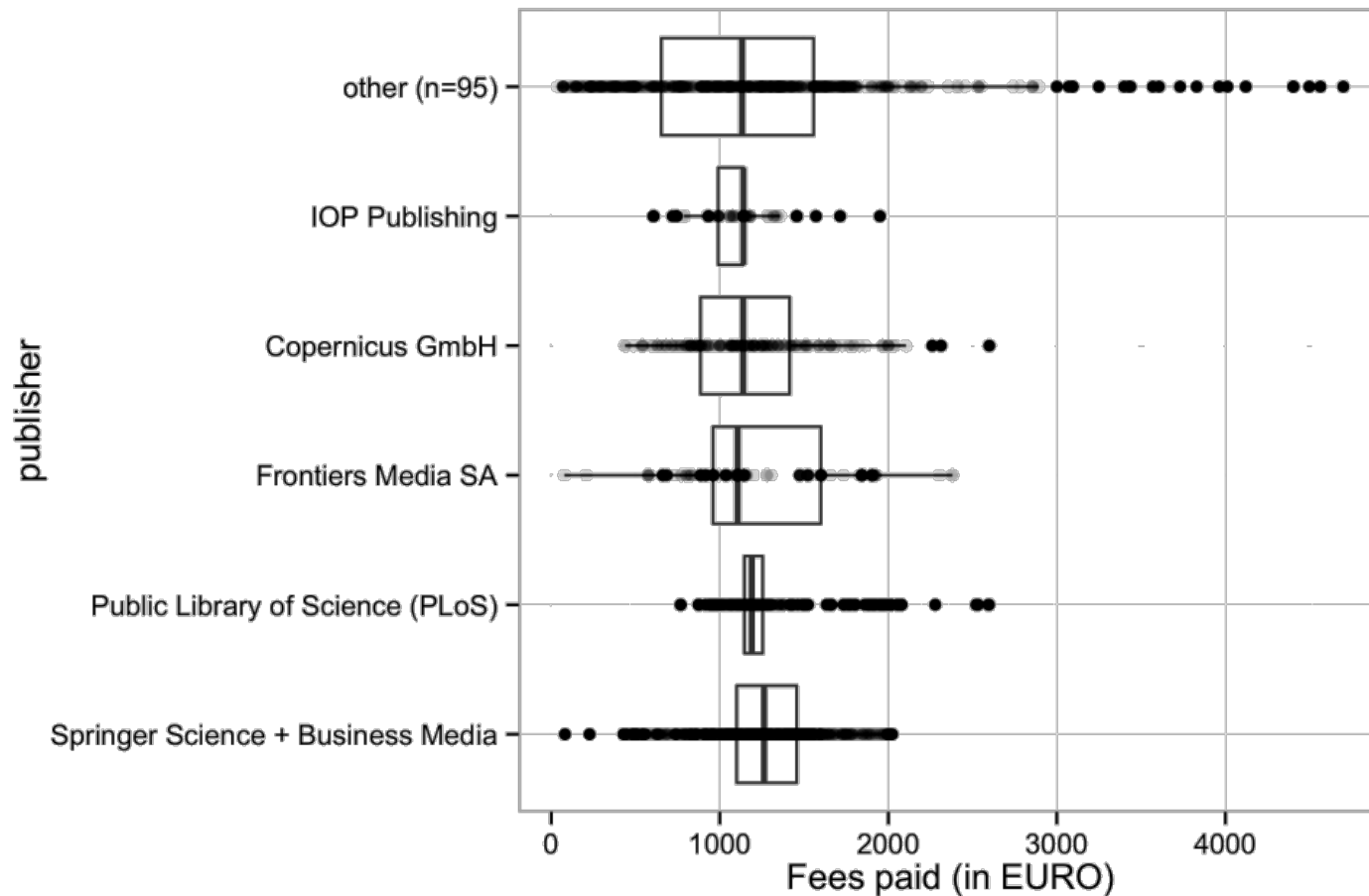
Current expenses per article

~ 5,000 Euro





# APC levels, current evidence



German OpenAPC Initiative at <https://github.com/OpenAPC/openapc-de>



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# APC levels, current evidence

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*“In total, 4,345,486 EUR for 3,515 articles  
were paid by the participating universities.  
Average fee is 1,236.30 EUR  
and the median 1,201 EUR.”*

German OpenAPC Initiative, September 2015 at <https://github.com/OpenAPC/openapc-de>



# APC levels, current evidence

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- $\text{SCOAP}^3 < 1,100 \text{ EUR}$
- Cap applied by German Research Foundation for APC funds = 2,000 EUR



# Scenario of transformation based on current operating numbers per year

## Global view

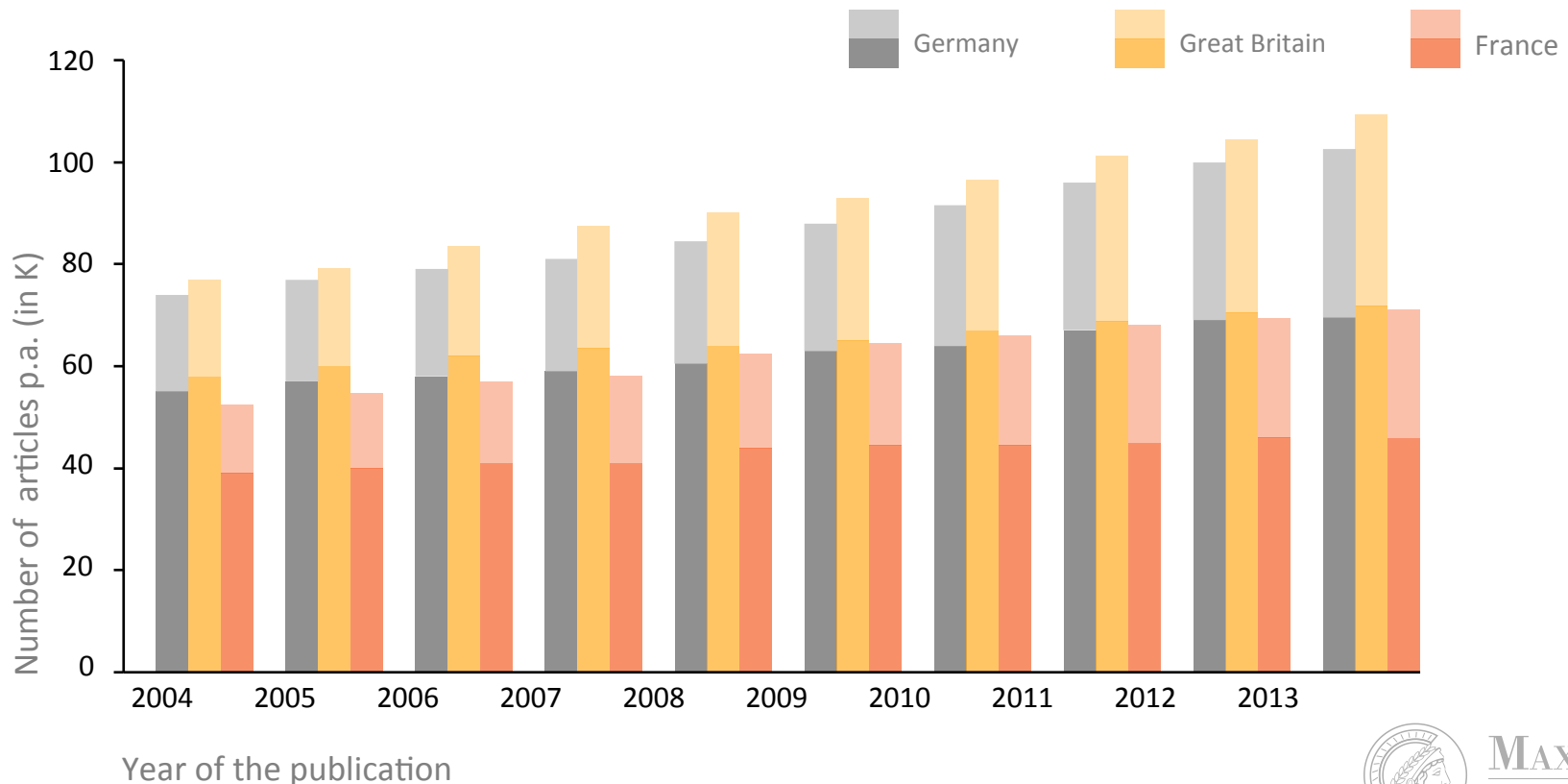


# Publication volume of selected European countries

## Total publication volume

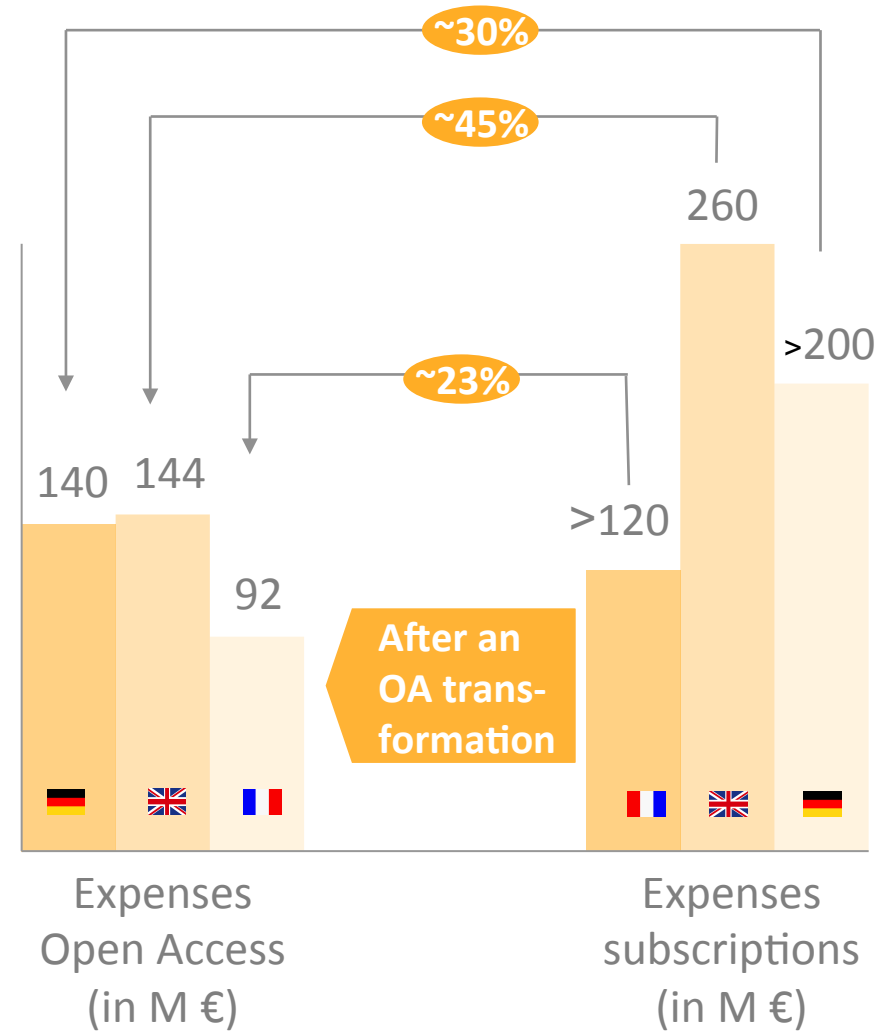
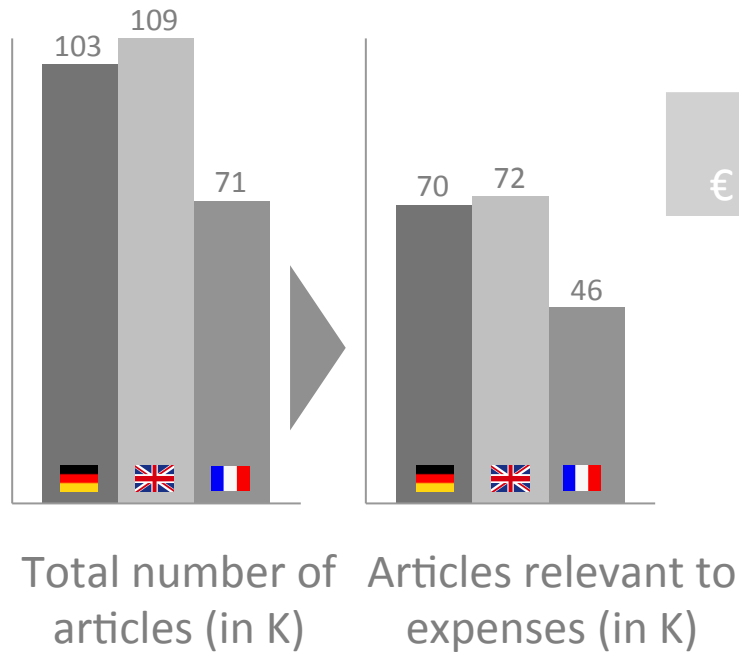
Articles and reviews in Web of Science

The dark part of the columns marks the share of articles with a corresponding author from this country ( $\leq 70\%$ ).



# Output volume and expenses in DE, UK, and FR

## Publication data 2013



# Conclusion I

Development based on realistic  
APC expectations shows clear  
potential of savings.

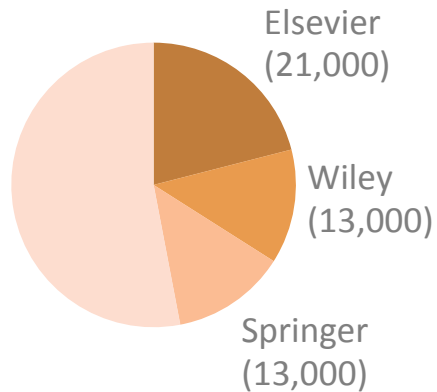


# Close-up country view: share of major publishers in Germany 2013

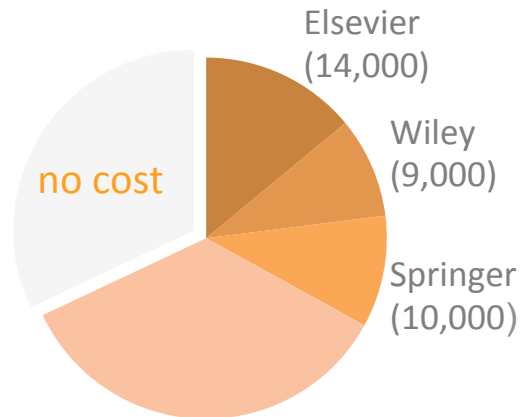
## Publications

Share of overall publications

N = 103,000 journal publications

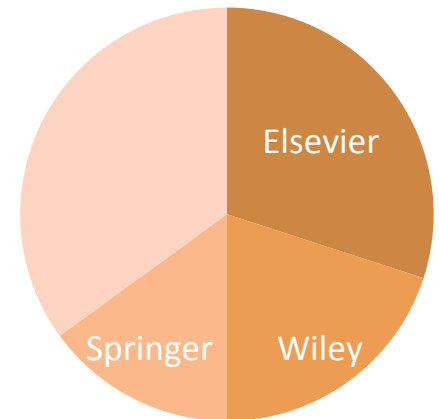


Share of publications with corresponding author



## Library expenses

Typical shares of journal expenses





# Institutional level – Max Planck “formula”

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## Total paper output

**10,000 research articles per year**

- According to Web of Science data, articles and article reviews

## APC relevant share

**Maximum of 6,000 (60%)**

- (between 40-60% corresponding author papers)  
This pattern is persistent across the various OA publishers and stable over time

## Average APC level monitored

**Current average APC of ~ 1,300 EUR,**

- based on 1,046 APC invoices with a total spend (including taxes) of some 1.3 EUR million [as of April 2015]

## Expected total expenditure

**6,000 x average APC + safety margin ≤ €12 million**

- These anticipated costs are very comfortably within our current spending levels

The Max Planck Society as a heavily output-oriented research organization is able and committed to make the transformation.



## Conclusion II

- When calculating transition scenarios, we need to take into account shares of corresponding authors only.
- Potential of savings becomes apparant on country and institutional levels, too.



## The lesson is clear:

- An OA transformation seems to be possible without financial risks.
- Subscriptions must be stopped and reinvested in open access business models.

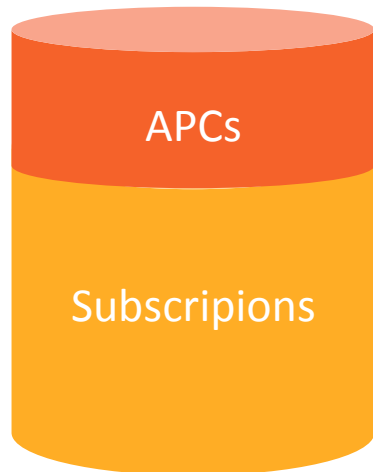


# Offsetting– hybrid „reloaded“

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## Hybrid Model

... known for „double dipping“



Institutional costs for open access publishing with publisher X



Institutional costs for access to publisher X

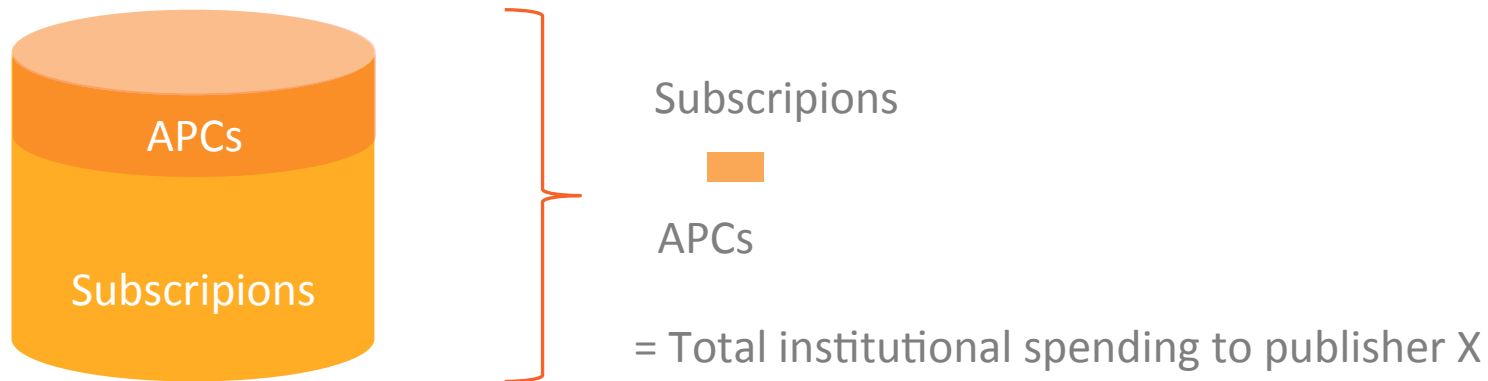


# Offsetting– hybrid „reloaded“

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## Offsetting

- Publisher X reduces subscription costs according to the APC revenue from an institution (In the narrower sense).
- In the broad sense: compensation of subscription and publishing costs



# Offsetting– hybrid „reloaded“

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## Transition

As open access availability increases, subscription costs should be reduced step-by-step in favor of an APC based business model.



# Conclusion III

- Offsetting can be seen as be a promising approach to a large-scale transition.
- It touches the existing corpus of scientific journals.
- There is no need for researchers to change their publishing habits.



# Instead of convincing researchers...

„Double dipping“ Open Peer Review Institutional OA Policies  
Publication Funds Open Educational Resources  
Golden route Predatory publishing Reputation  
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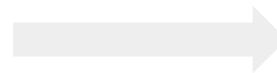


... let's start with the transition.

Open Access  
2 million scientific papers



7,6 bn  
EUR/ year



# Road to transition

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## Start working on transition scenarios:

- Capture publication data on country and institutional levels
- Capture subscription costs data on country and institutional levels
- Link current costs with publications, work on offsetting scenarios on publisher levels, institutional levels, country levels
- Focus on those publishers and disciplines absorbing the largest budget shares (STM).



# Output volume in Finland

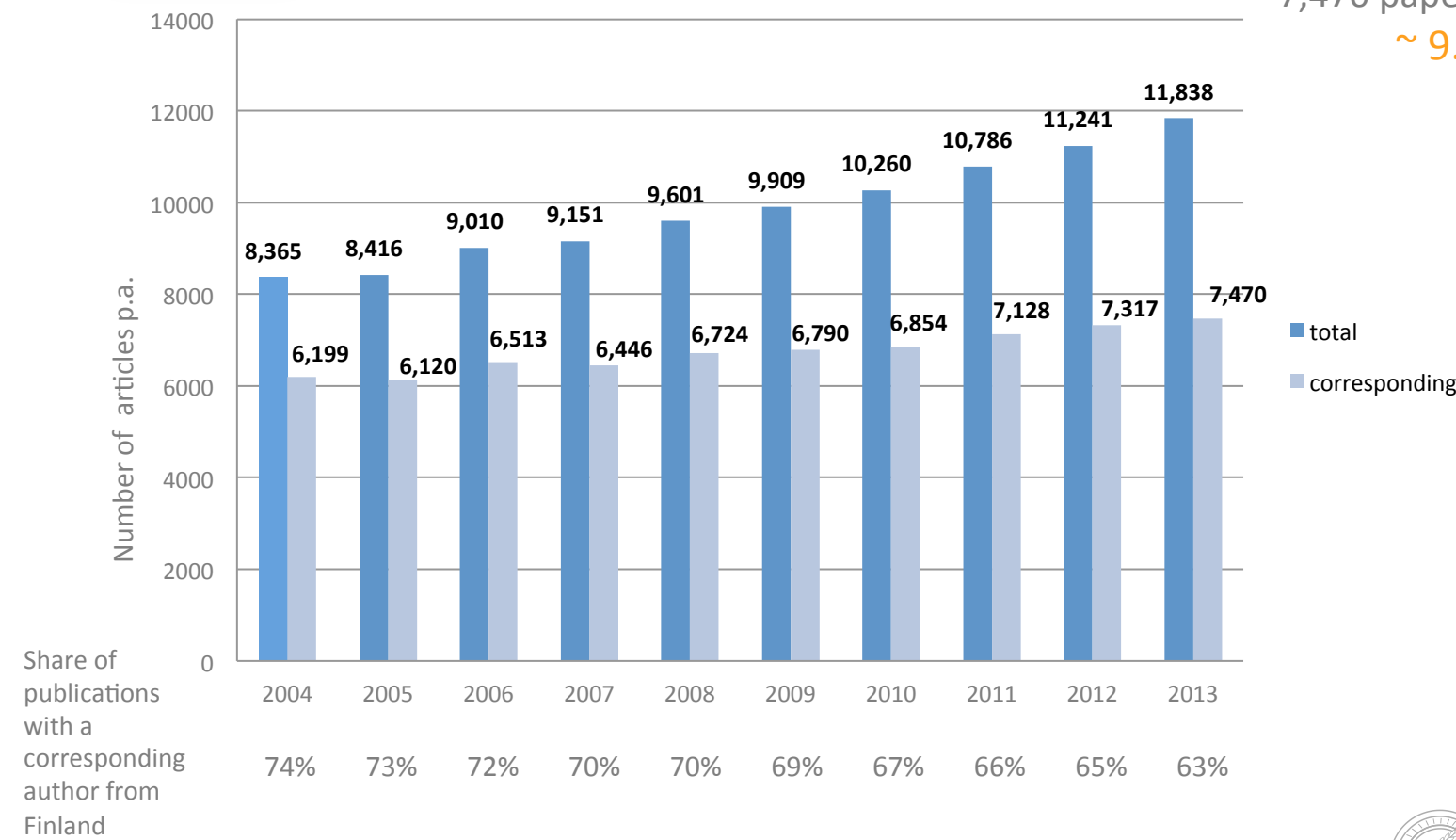


## Finland

Publication volumes and correspondig author shares  
Articles and reviews in Web of Science

7,470 papers x 2,000 € =  
~ 15m €

7,470 papers x 1,300 € =  
~ 9.7m €



# Road to transition

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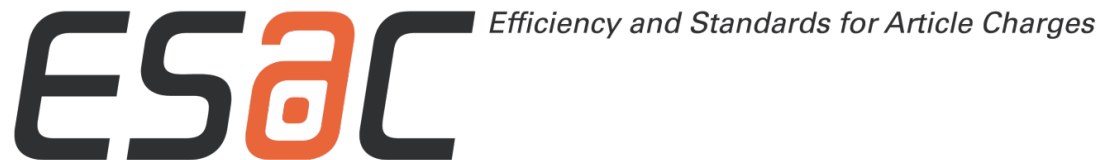
- Work on efficient infrastructure, help to build up scalable processes for APC transactions.
- Work on price transparency: publish APC data, neglect confidential clauses.



# Community-built infrastructure to ensure transparency and efficiency

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- OpenAPC Initiative <https://github.com/OpenAPC/openapc-de>
- ESAC <http://www.esac-initiative.org>



# Subscription payments must be stopped

## Global concerted action needed

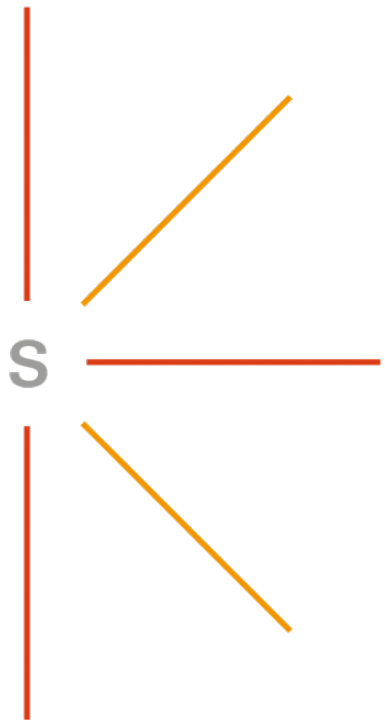
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Staging the Open Access Transformation of  
Subscription Journals

o p e n      a c c e s s

**B E R L I N   1 2**

8-9 December 2015



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# Thank you.

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Data analyses by Margit Palzenberger / RIO, please cite:  
Palzenberger, M. (2015). Number of Scholarly Articles  
per Country. <http://dx.doi.org/10.17617/1.2>



# Offsetting– hybrid „reloaded“

## Variety of offsetting schemes currently in place

• APC spend returned as deduction against future subscriptions	IOP (in AT), Wiley
• No extra charges beyond subscription payments for authors of subscribing institutions	ECS
• Discount on Article Processing Charges	PNAS
• Vouchers for spend against Article Processing Charges	RSC
• „Read and publish“ agreement	Springer Compact

Many differences with regard to overall costs, ease of administration, transparency and contribution to a full OA transition.





# Transition models

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It is also possible for libraries to support an infrastructure instead of simply purchasing journals

- SCOAP<sup>3</sup> Consortium
- Open Library of the Humanities: System of Library Partnership Subsidy

(LPS) → no APCs for authors („To fund an operation publishing 250 articles and 12 books in partnership with reputable presses per year, we need a banded average of just \$700 from 500 libraries. If 1000 libraries participated, this cost is lowered to \$350. On the \$700 rate that's a cost to each library of \$2.80 per article. And you get 12 books per year (as part of our monograph pilot study). This becomes cheaper with every library that joins.” <https://about.openlibhums.org/2014/04/07/library-partnership-subsidies-lps/><https://about.openlibhums.org/2014/04/07/library-partnership-subsidies-lps/>)

- Knowledge Unlatched

